

# North American Natural Gas Crisis

Comments on Draft IEPR Chapter 7  
California Energy Commission Hearing

October 7, 2005

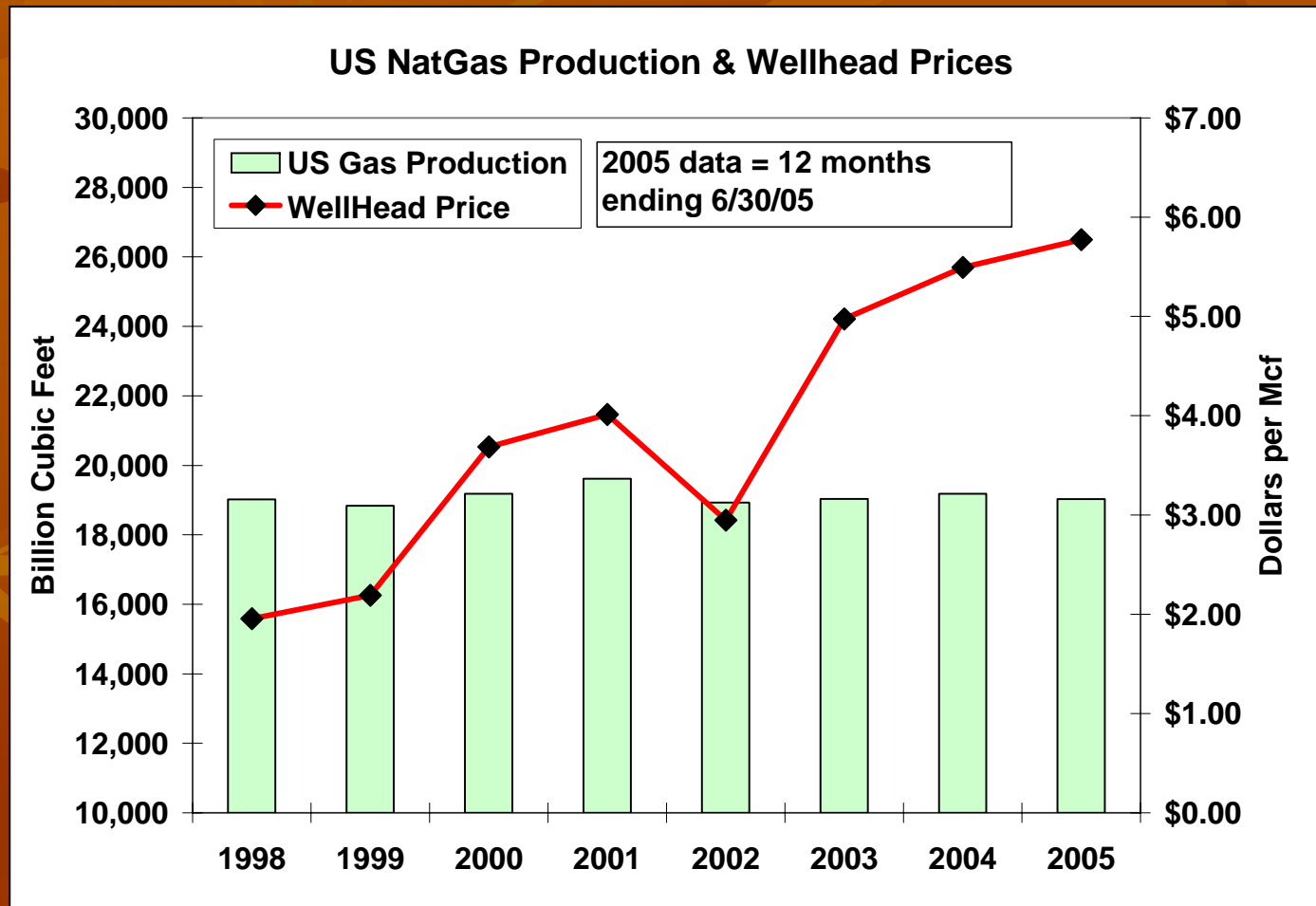
Rich Ferguson, PhD

CEERT

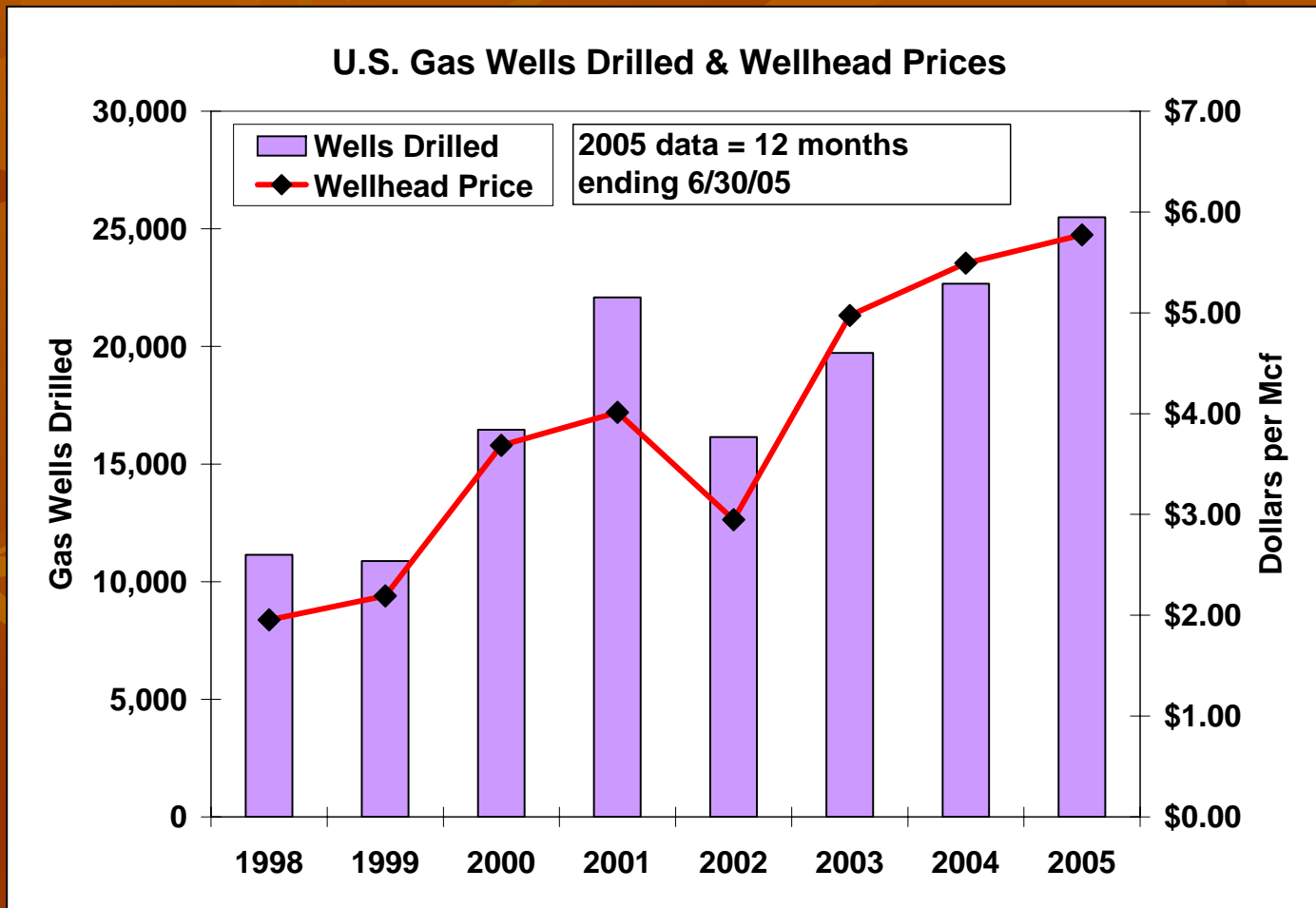
# Draft IEPR fails to communicate *urgent need for action*

- NYMEX natural gas prices have increased more than 500% in the last 6 years.
- California's annual natural gas bill is about \$20 billion at a price of \$10/Mcf, 5 times as much as in 1999.
- Despite high prices, US gas production is not increasing, even before hurricanes.
- US production will not increase in the foreseeable future, especially if LNG imports reduce wellhead prices.
- The threat to California is skyrocketing prices, not physical shortages.

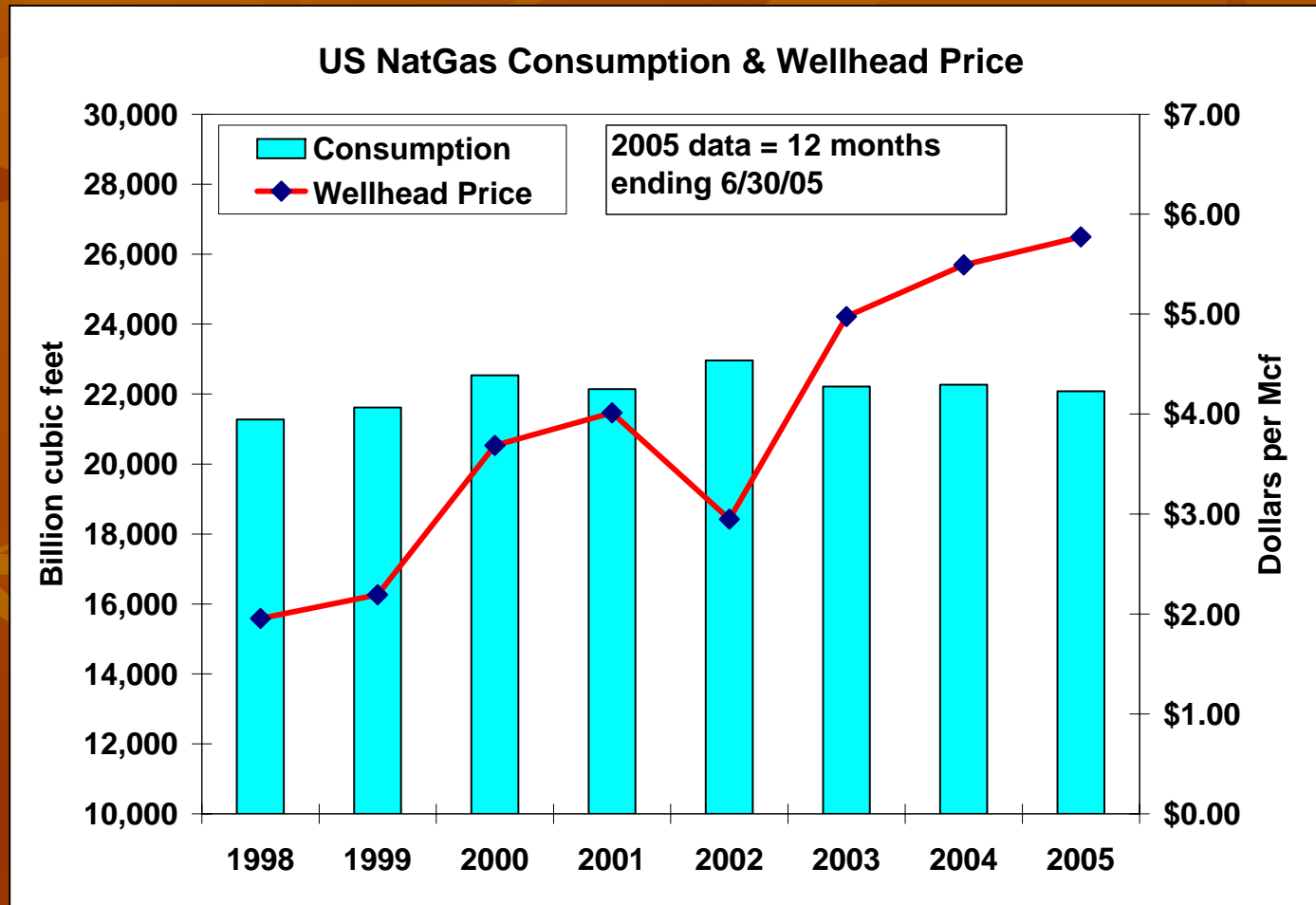
# Production has not responded to high prices



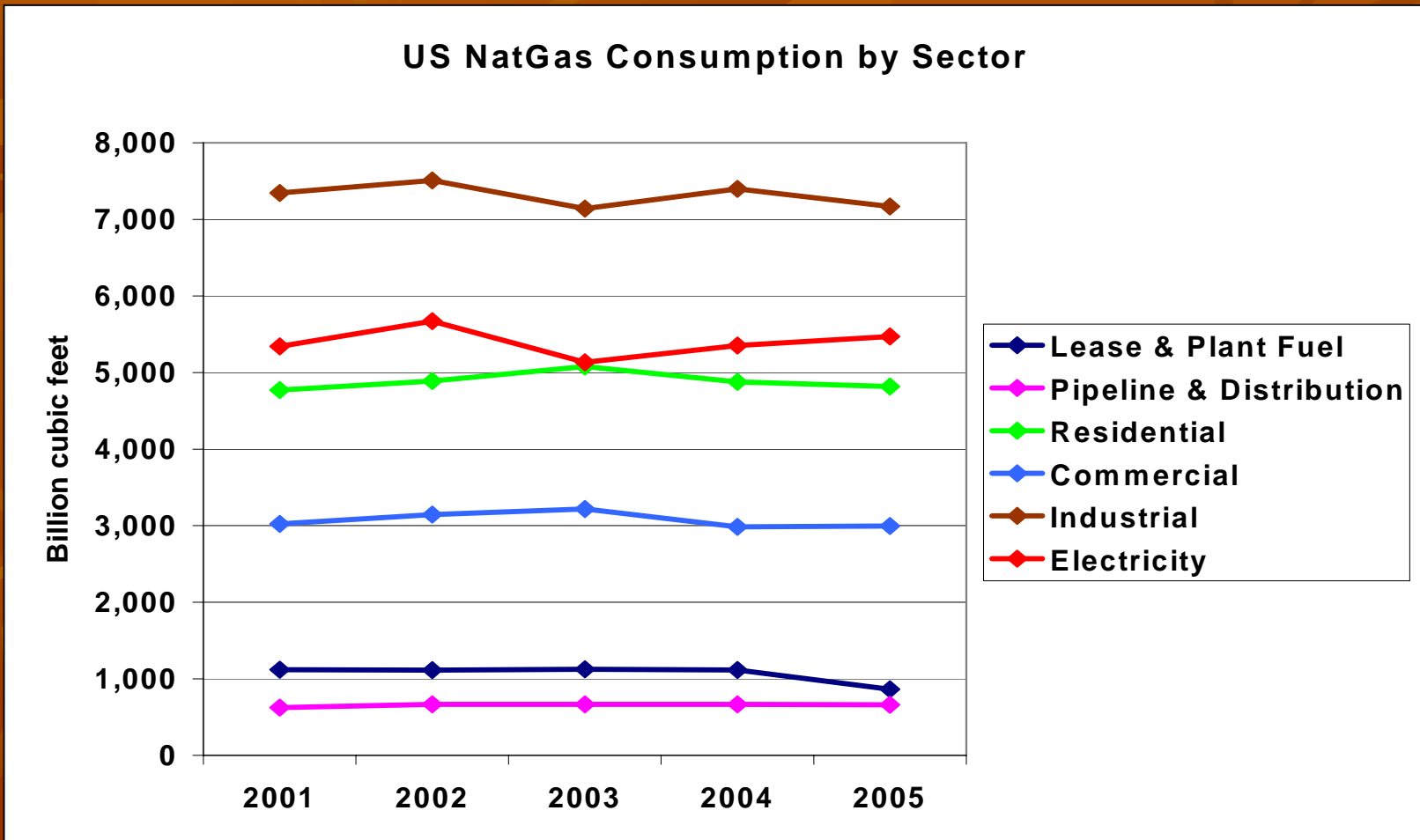
# Drilling *has* been responded to high prices



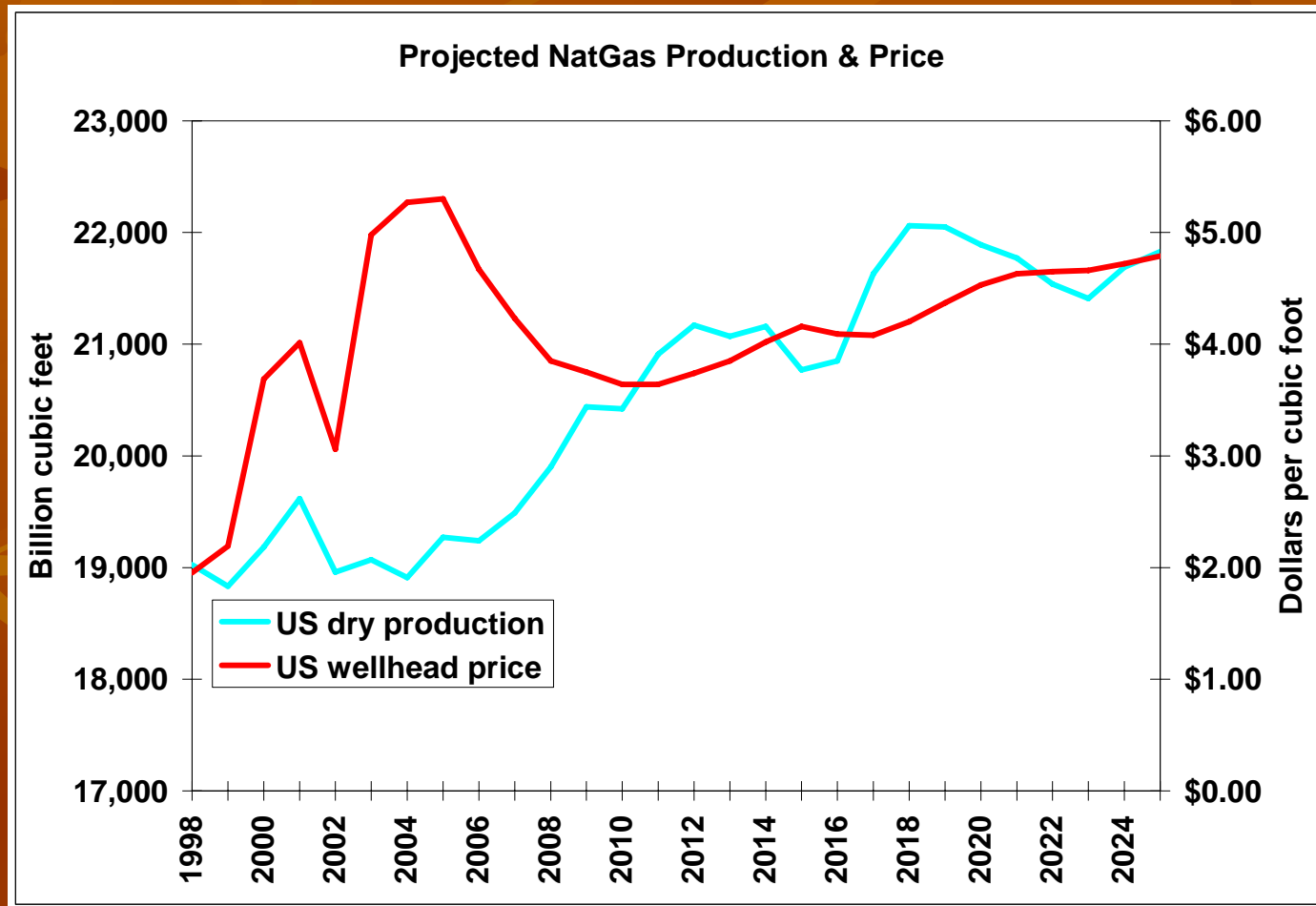
# You can't burn gas you don't have



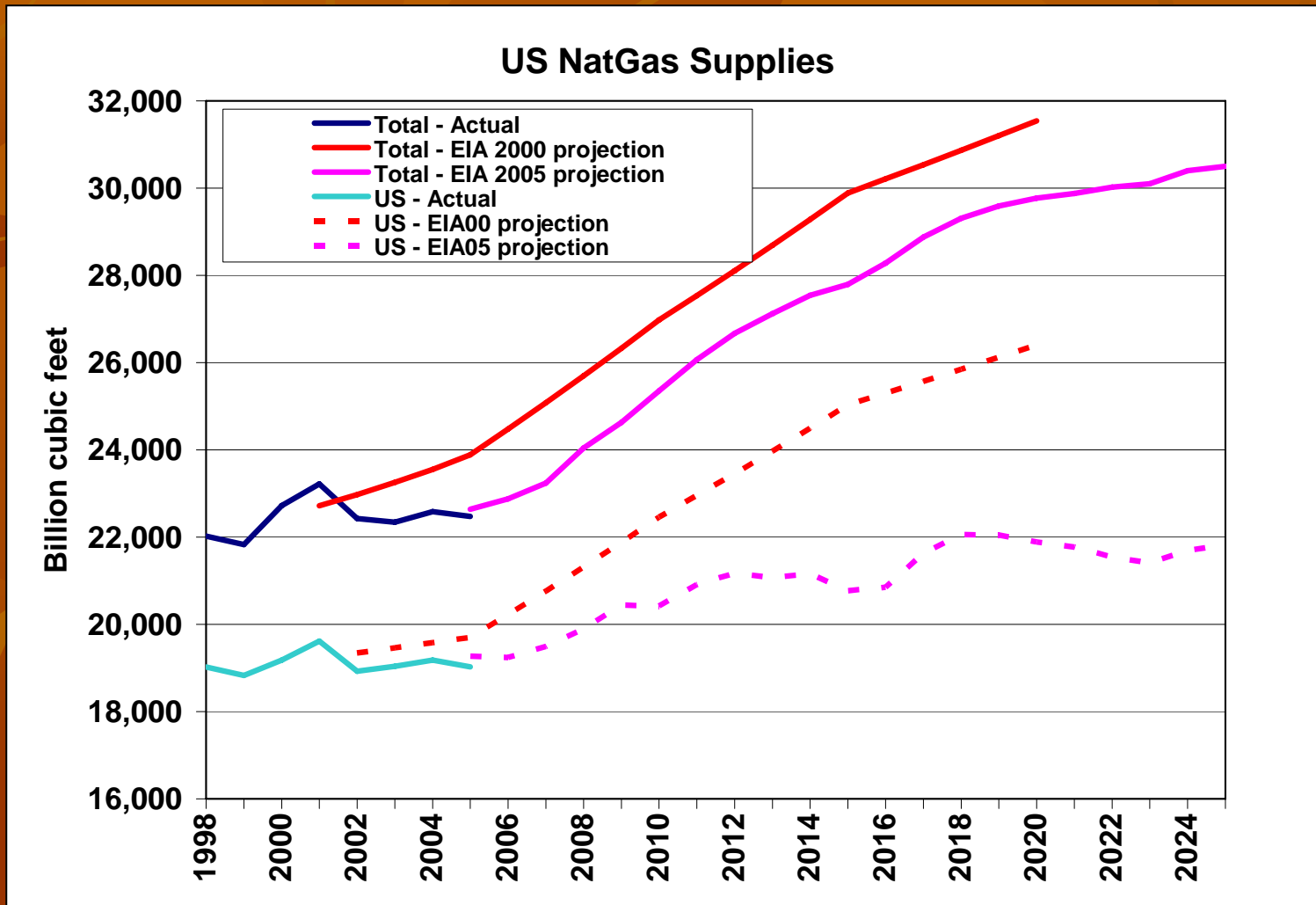
# Consumption has been ~flat across all sectors



# Projections from USEIA are not credible



# USEIA keeps repeating mistakes





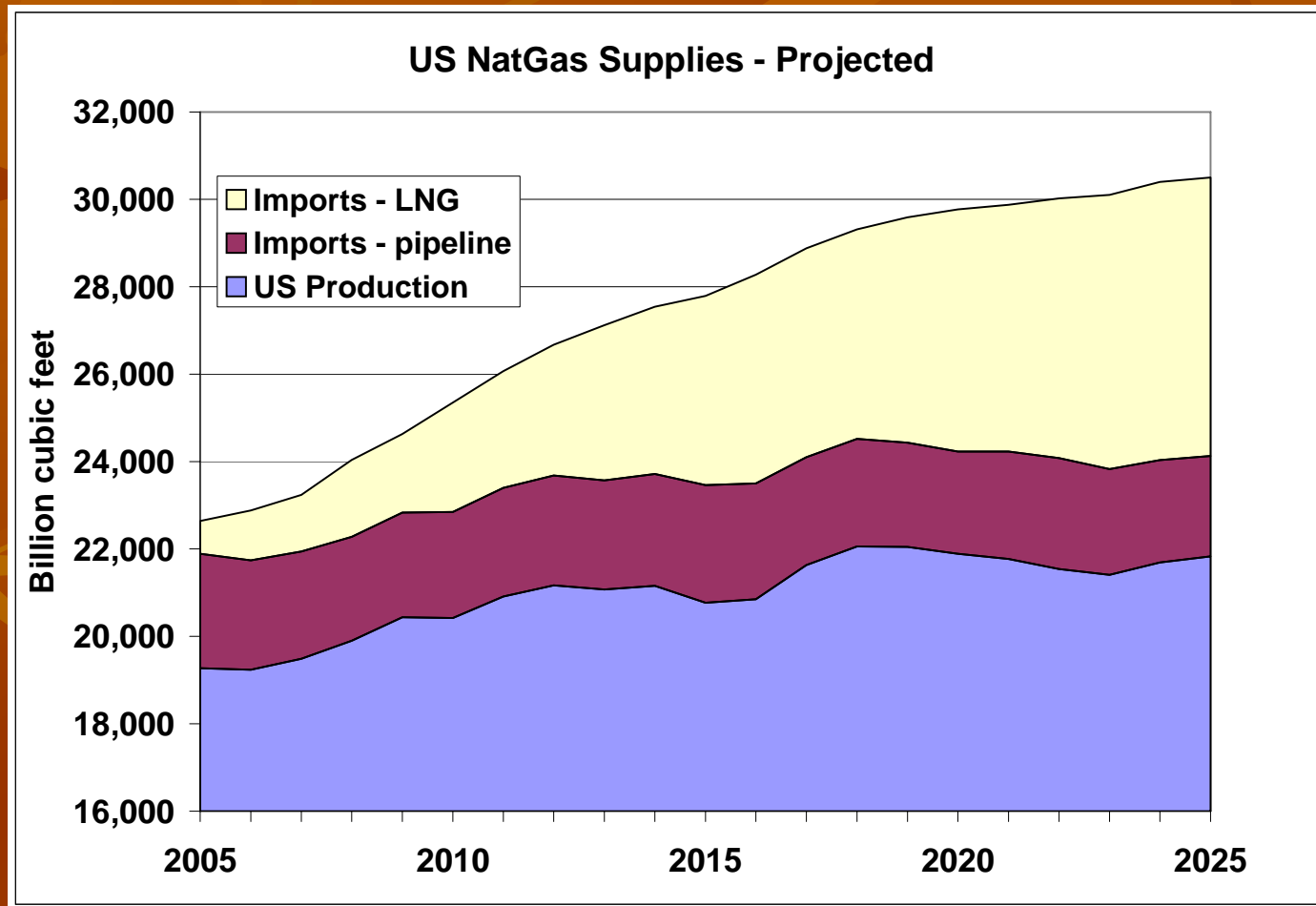
# Natural gas market failure

- Current gas prices reflect scarcity rents ~3 times the marginal cost of production.
- Equilibrium models like NEMS are worthless in current market.

# Ferguson's Forecast

- Gas prices will remain at or above current levels until supply expands or consumption declines.

# USEIA scenario gambles on massive imports of LNG



## ***Urgent*** – **California's gas consumption must be reduced**

- California's annual natural gas bill is ~ \$20 billion at a price of \$10/Mcf.
- Prices are currently above \$10 and not expected to decrease –\$20 or higher is not impossible.
- 50% of California's gas bill is for electricity – obviously the place to start.

# IEPR recommendations

- Energy Efficiency – an emergency investment program to retire all old inefficient equipment now connected to the electricity grid.
  - The Commission should establish a gas price benchmark for use in cost/benefit tests.
  - Immediate goals should reflect *all* cost effective measures, as “loading order” requires, using the benchmark price.
  - All gas and electric load serving entities must be required to reduce consumption.

## IEPR recommendations (cont.)

- Renewable energy development – a crash program to connect the state's renewable energy resources to the grid asap.
  - RPS implementation has become a regulatory quagmire.
  - Megawatts, not megawords.
  - Tehachapi wind and Salton Sea geothermal would displace gas worth > \$2.5 billion annually at current prices.
- All load serving entities must participate – delays must not be tolerated.
- State government should consider contracting for renewable power as it did for gas-fired power a few years ago.